

## **ABSTRACT**

**TITLE:** Study of ocular motor cranial nerve palsies in diabetes mellitus.

### **AIM AND OBJECTIVES:**

To study the ocular motor nerve palsy pattern in diabetes mellitus, relationship of glycemic status in oculomotor nerve palsies, the association of diabetic retinopathy in case of ocular motor nerve palsies and the recovery pattern.

### **METHODOLOGY:**

Fifty patients with diabetes mellitus presenting with infranuclear ocular motor nerve palsies were registered. All supranuclear and nuclear nerve palsies were excluded. General examination and detailed ophthalmic examination including head posture, facial symmetry, any deviation of eyeball noted. A detailed fundus examination, refraction and diplopia charting were done. Patients were followed up at regular intervals.

### **RESULTS:**

The diabetic ocular motor nerve palsies were more common in the age group of 51 to 60 yrs with slightly more male predominance. The patients presented mostly with diplopia due to a more common involvement of sixth cranial nerve. Fourth nerve involvement was less frequent. It has been found that the involvement of ocular motor cranial nerves in diabetic patients has been associated with glycemic status. There was a positive correlation between HbA<sub>1c</sub> values and degree of retinopathic changes in diabetes mellitus. Ninety percent of patients had either complete or partial recovery from ocular motor nerve palsies.

### **SUMMARY:**

Ocular motor nerve palsies are associated with diabetes mellitus. Glycemic status has a positive correlation to retinopathic changes. Ninety percent of patients had a complete or partial recovery from ocular motor nerve palsies.

### **KEYWORDS:**

Diabetes mellitus, ocular motor nerves, diplopia, diabetic retinopathy.